CLAIMS:

1. A method for controlling at least a valve that may be deactivated to operate in at least a cylinder of an internal combustion engine, the method comprising:

operating at least a cylinder in said internal combustion engine;

adjusting the number of valves that operate in a cycle of said cylinder based at least on an operating condition of at least a vehicle chassis system.

2. The method of Claim 1 wherein said operating condition is at least a modal frequency of said vehicle chassis.

3. The method of Claim 1 wherein operation of said valve is further based on said internal combustion engine speed.

4. The method of Claim 1 wherein operation of said valve is further based on the number of active cylinders in said internal combustion engine.

5. The method of Claim 1 further comprising adjusting a damping ratio of at least an engine mount in response to operation of said valve.

6. The method of Claim 1 wherein said valve is a mechanical actuated valve that may be deactivated.

7. The method of Claim 1 wherein said valve is an electromechanical valve.

8. A method for controlling at least an electromechanically actuated valve to operate in at least a cylinder of an internal combustion engine, the method comprising:

determining an operating condition of a vehicle chassis system;

evaluating whether to operate said electromechanical actuated valve in said cylinder based on said operating condition;

operating said electromechanically actuated valve during a cycle of said cylinder based on said evaluation.

9. The method of Claim 8 wherein said operating condition is at least a modal frequency of said vehicle chassis.

10. The method of Claim 8 wherein operation of said electromechanically actuated valve is further based on said internal combustion engine speed.

11. The method of Claim 8 wherein operation of said electromechanically actuated valve is further based on the number of active cylinders in said internal combustion engine.

12. The method of Claim 8 further comprising adjusting a damping ratio of at least an engine mount in response to operation of said electromechanically actuated valve.

13. A method for controlling at least an electromechanically actuated valve to operate in at least a cylinder of an internal combustion engine, the method comprising:

determining an operating condition of a vehicle mechanical component;

evaluating whether to operate said electromechanical actuated valve in said cylinder based on said operating condition;

operating said selected electromechanically actuated valve during a cycle of said cylinder based on said evaluation.

14. The method of Claim 13 wherein said operating condition is at least a modal frequency of said vehicle mechanical component.

15. The method of Claim 14 wherein said vehicle mechanical component is a bracket.

16. The method of Claim 13 wherein operation of said electromechanically actuated valve is further based on said internal combustion engine speed.

17. The method of Claim 13 wherein operation of said electromechanically actuated valve is further based on the number of active cylinders in said internal combustion engine.

18. The method of Claim 13 wherein said operating condition is at least a modal frequency of a driveshaft.

19. The method of Claim 13 further comprising adjusting a damping ratio of at least an engine mount in response to operation of said electromechanically actuated valve.

20. A method for controlling electromechanically actuated valves in an internal combustion engine, the method comprising:

determining an operating condition of a vehicle chassis system;

evaluating whether to activate a cylinder based on said operating condition;

activating said cylinder during a cycle of said cylinder based on said evaluation.

21. The method of Claim 20 wherein said operating condition is at least a modal frequency of said vehicle chassis.

22. The method of Claim 20 wherein operation of said electromechanically actuated valve is further based on said internal combustion engine speed.

23. A computer readable storage medium having stored data representing instructions executable by a computer to control an internal combustion engine of a vehicle, said storage medium comprising:

instructions for operating at least a cylinder in said internal combustion engine with a first number of valves active during a cycle of said cylinder at least during a first vehicle chassis system condition; and

instructions for operating at least a cylinder in said internal combustion engine with a second number of valves active during a cycle of said cylinder at least during a second vehicle chassis system condition, with said first number different from said second number, and said first vehicle chassis system condition different from said second vehicle chassis condition.